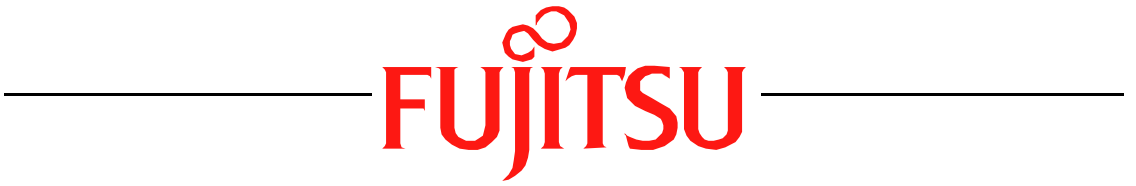

Fujitsu LifeBook

S Series

BIOS Guide

LifeBook S Series Model:

S7110

Document Date: 03/14/2006

Document Number: FPC58-1490-01

FUJITSU COMPUTER SYSTEMS

S Series BIOS

BIOS SETUP UTILITY

The BIOS Setup Utility is a program that sets up the operating environment for your notebook. Your BIOS is set at the factory for normal operating conditions, therefore there should be no need to set or change the BIOS environment to operate your notebook.

The BIOS Setup Utility configures:

- Device control feature parameters, such as changing I/O addresses and boot devices.
- System Data Security feature parameters, such as passwords.

Entering the BIOS Setup Utility

To enter the BIOS Setup Utility do the following:

1. Turn on or restart your notebook.
2. Press the [F2] key when a message appears under the Fujitsu logo prompting you to "Press <F2>: BIOS Setup". This will open the main menu of the BIOS Setup Utility with the current settings displayed.
3. Press the arrow keys to scroll through the other setup menus to review or alter the current settings.

Navigating Through the Setup Utility

The BIOS setup utility consists of six menus: Main, Advanced, Security, Boot, Info and Exit. This document explains each menu in turn including all submenus and setup items.

The following procedures allow you to navigate the setup utility menus:

1. To select a menu, use the cursor keys: [←], [→].
2. To select a field within a menu or a submenu, use the cursor keys: [↑], [↓].
3. To select the different values for each field, press the [Spacebar] to change to the next higher selection and [F5] or [-] to go to the next lower selection.
4. To activate a submenu press the [Enter] key.
5. To return to a menu from a submenu, press the [Esc] key.
6. To go to the Exit menu from any other menu, press the [Esc] key.

- Selecting a field causes a help message about that field to be displayed on the right-hand side of the screen.
- Pressing the Enter key with the highlight on a selection that is not a submenu or auto selection will cause a list of all options for that item to be displayed. Pressing the Enter key again will select the highlighted choice.

7. Pressing the [F9] key resets all items in the BIOS to the default values.
8. Pressing the [F10] key saves the current configuration and exits the BIOS Setup Utility. You will be asked to verify this selection before it is executed.
9. Pressing the [F1] key gives you a general help screen.

Entering the Setup Utility After a Configuration Change or System Failure

If there has been a change in the system configuration that does not agree with the parameter settings stored in your BIOS memory, or there is a failure in the system, the system beeps and/or displays an error message after the Power On Self Test (POST). If the failure is not too severe, it will give you the opportunity to modify the settings of the setup utility, as described in the following steps:

1. When you turn on or restart the computer there is a beep and/or the following message appears on the screen:

   ```
   Error message - please run SETUP
   program Press <F1> key to continue,
   <F2> to run SETUP
   ```

2. If an error message is displayed on the screen, and you want to continue with the boot process and start the operating system anyway, press the [F1] key.

- If your notebook emits a series of beeps that sounds like a code and the display is blank, refer to the Troubleshooting section of your system Use's Guide. The Troubleshooting Section includes a list of error messages and their meanings.
- If your data security settings require it, you may be asked for a password before the setup utility will be opened.

3. If an error message is displayed on the screen, and you want to enter the setup utility, press the [F2] key.
4. When the setup utility starts with a fault present, the system displays the following message:

   ```
   Warning!
   Error message
   [Continue]
   ```

5. Press any key to enter the setup utility. The system will then display the Main Menu with current parameters values.

MAIN MENU – SETTING STANDARD SYSTEM PARAMETERS

The Main Menu allows you to set or view the current system parameters. Follow the instructions for Navigating Through The Setup Utility to make any changes. *(See Navigating Through the Setup Utility on page 2 for more information)*

The following tables show the names of the menu fields for the Main menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use. Note that the actual drive labels shown may vary.

> System time and date can also be set from your operating system without using the setup utility. Use the Date and Time icon on your Windows Control panel or type time or date from the MS-DOS prompt.

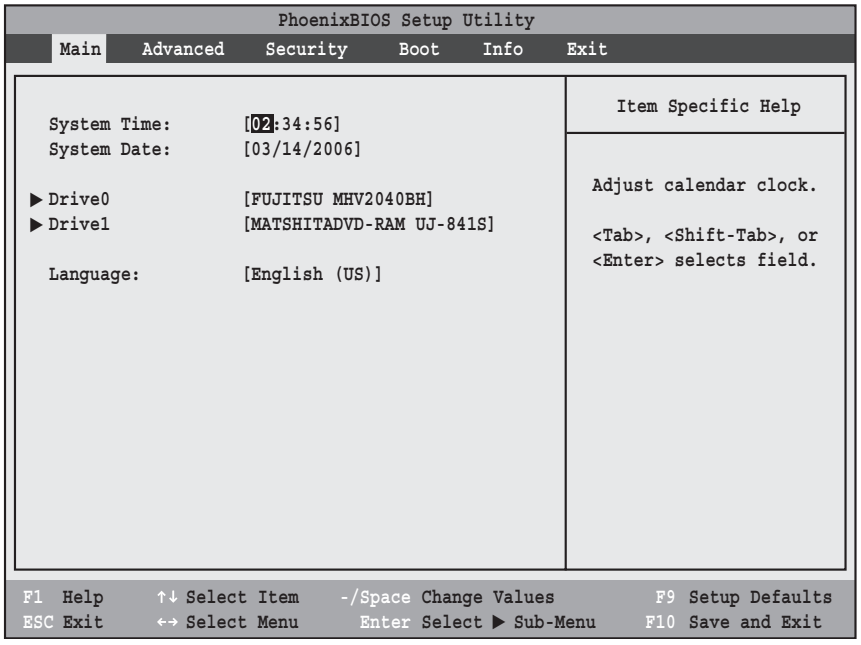
PhoenixBIOS Setup Utility
Main Advanced Security Boot Info Exit
System Time: [02:34:56]
System Date: [03/14/2006]
▶ Drive0 [FUJITSU MHV2040BH]
▶ Drive1 [MATSHITADVD-RAM UJ-841S]
Language: [English (US)]
Item Specific Help
Adjust calendar clock.
<Tab>, <Shift-Tab>, or <Enter> selects field.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 1. Main Menu

Table 1: Fields, Options and Defaults for the Main Menu

Menu Field	Options	Default	Description
System Time:	—	—	Sets and displays the current time. Time is in a 24 hour format of hours:minutes:seconds with 2 digits for each. (HH:MM:SS). Example: 16:45:57. You may change each segment of the time separately. Move between the segments with the [Tab] key and/or [Shift] + [Tab] keys.
System Date:	—	—	Sets and displays the current date. Date is in a month/day/year numeric format with 2 digits each for month and day and 4 digits for year. (MM/DD/YYYY) for example: 03/20/1998. You may change each segment of the date separately. Move between the segments with the [Tab] key and/or [Shift] + [Tab] keys.

Table 1: Fields, Options and Defaults for the Main Menu

Menu Field	Options	Default	Description
Drive0	Selects the Drive0 Serial ATA drive submenu	The product number of the hard drive.	Display the type of device on this ATA/IDE interface. Pressing the Enter key selects the Serial ATA Drive0 submenu allowing additional device configuration options for this interface.
Drive1:	Selects the Drive1 Serial ATA drive submenu	The product number of the CD-ROM drive.	Display the type of device on this ATA/IDE interface, if there is one. Pressing the Enter key selects the Serial ATA Drive1 submenu allowing additional device configuration options for this interface.
Language:	▪ English (US) ▪ Japanese (JP)	[English (US)]	The default setting differs between the US/European and the Japanese model. Selects the display language for the BIOS.

Drive0 Submenu of the Main Menu

The Drive0 submenu identifies what Serial ATA/IDE devices are installed.

Note that actual hard drive label shown may vary. Depending on the drive type, information such as cylinders, heads and sectors may also be displayed.

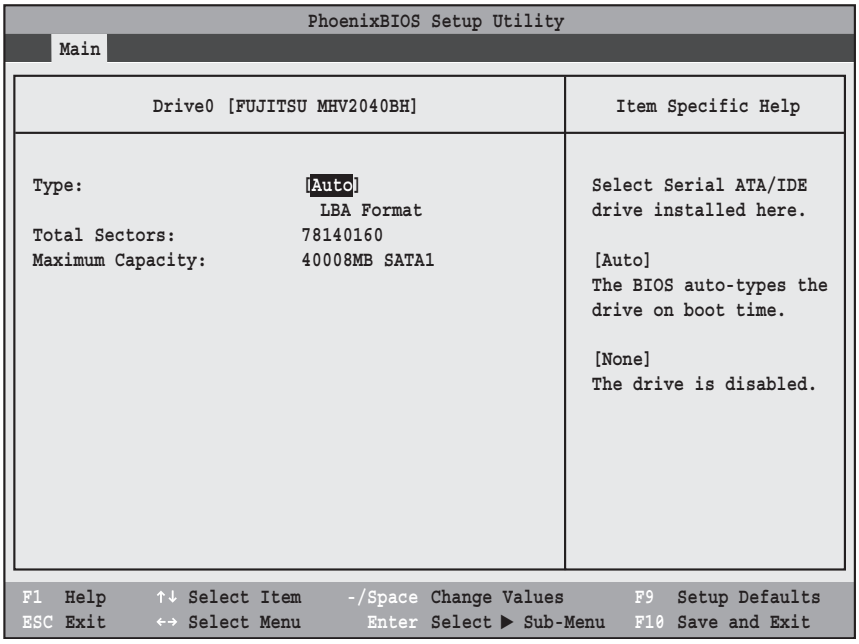
PhoenixBIOS Setup Utility
Main
Drive0 [FUJITSU MHV2040BH]
Item Specific Help
Type: [Auto]
LBA Format
Total Sectors: 78140160
Maximum Capacity: 40008MB SATA1
Select Serial ATA/IDE drive installed here.
[Auto]
The BIOS auto-types the drive on boot time.
[None]
The drive is disabled.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 2. Drive0 Submenu

Menu Field	Options	Default	Description
Type:	▪ Auto ▪ None	[Auto]	Select Auto to have the type of Serial or Parallel ATA device automatically identified by the BIOS at POST. If None is selected, the following Set-up items do not appear.
LBA Format			**Logical Block Addressing (LBA)**
Total Sectors:	---	---	The total number of sectors on your hard disk
Maximum Capacity:	---	---	The maximum capacity of your hard disk

Drive1 Submenu of the Main Menu

The Drive1 submenu allows you to configure secondary ATA devices.

Note that actual hard drive label shown may vary. Depending on the drive type, information such as cylinders, heads and sectors may also be displayed.

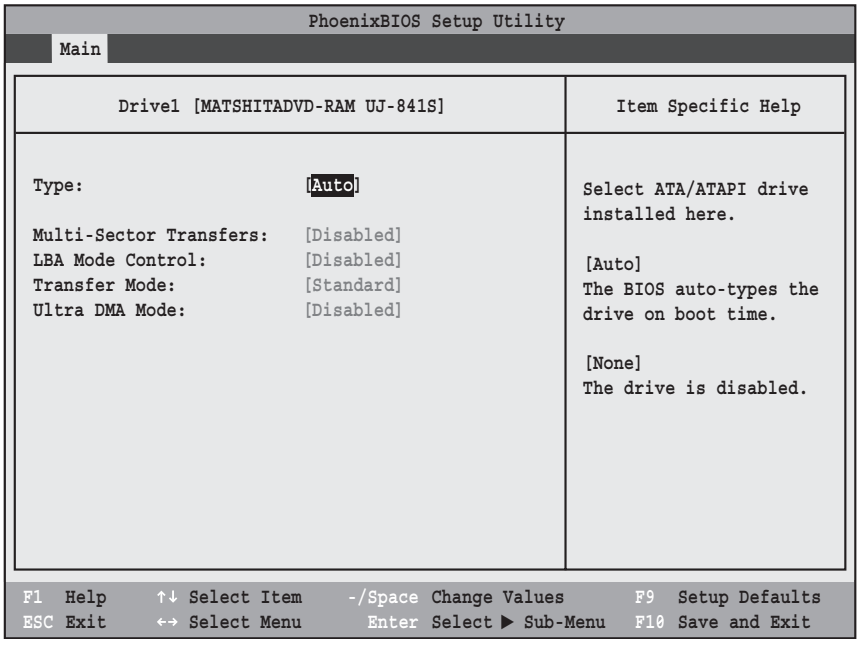
PhoenixBIOS Setup Utility
Main
Drive1 [MATSHITADVD-RAM UJ-841S]
Item Specific Help
Type: [Auto]
Multi-Sector Transfers: [Disabled]
LBA Mode Control: [Disabled]
Transfer Mode: [Standard]
Ultra DMA Mode: [Disabled]
Select ATA/ATAPI drive installed here.
[Auto]
The BIOS auto-types the drive on boot time.
[None]
The drive is disabled.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 3. Drive1 Submenu

Table 3: Fields, Options and Defaults for the Drive1 Submenu of the Main Menu

Menu Field	Options	Default	Description
Type:	▪ Auto ▪ None	[Auto]	Selects the ATA/ATAPI device type. Select Auto to have the device (CD-ROM, CD-R/RW, DVD-ROM, etc.) automatically identified by the BIOS at POST. If None is selected, the following Set-up items do not appear.
Multi-Sector Transfers:	▪ Disabled ▪ 2 Sectors ▪ 4 Sectors ▪ 8 Sectors ▪ 16 Sectors	[Disabled]	This option cannot be changed when Auto is selected. Specify the number of sectors per block for multiple sector transfer.
LBA Mode Control:	▪ Disabled ▪ Enabled	[Disabled]	Enables or disables Logical Block Addressing in place of Cylinder, Head, Sector addressing. This option cannot be changed when Auto is selected.

Table 3: Fields, Options and Defaults for the Drive1 Submenu of the Main Menu

Menu Field	Options	Default	Description
Transfer Mode:	▪ Standard ▪ Fast PIO 1 ▪ Fast PIO 2 ▪ Fast PIO 3 ▪ Fast PIO 4 ▪ Multiword DMA 1 ▪ Multiword DMA 2	[Standard]	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed when Auto is selected.
Ultra DMA Mode:	▪ Disabled ▪ Mode 0 ▪ Mode 1 ▪ Mode 2 ▪ Mode 3 ▪ Mode 4 ▪ Mode 5	[Disabled]	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed when Auto is selected.

- A bootable CD-ROM may have either a floppy disk or hard drive format. When the bootable CD-ROM is used, the drive allocations change automatically without changing the BIOS setup. If a floppy disk format CD-ROM is used, the CD-ROM becomes Drive A. The CD-ROM will only take drive C: (hard drive format) if the internal hard drive is not present or is disabled. The bootable CD-ROM can never use a C: designation if a formatted internal hard drive is present since the C: designator is always reserved for the internal hard drive. The boot sequence ignores the new drive designations, however, your application software will use the new designations.
- Be aware of the operating environment when booting from a CD-ROM or you may overwrite files by mistake.

Exiting from Main Menu

When you have finished setting the parameters on this menu, you can either exit from the setup utility, or move to another menu. If you wish to exit from the setup utility, press the [Esc] key or use the cursor keys to go to the Exit menu or to move to another menu.

ADVANCED MENU – SETTING DEVICE FEATURE CONTROLS

The Advanced Menu allows you to:

- Set the I/O addresses for the serial and parallel ports.
- Set the features of the keyboard/mouse.
- Select between the display panel and/or an external CRT display.
- Set internal device configurations
- Configure USB and CPU features.
- Configure miscellaneous features such as Wake Up On LAN.
- Configure DMI Event Logging.

Follow the instructions for Navigating Through the Setup Utility to make any changes.

(See Navigating Through the Setup Utility on page 2 for more information)

The following tables show the names of the menu fields for the Advanced Menu and its submenus, all of the options for each field, the default settings and a description of the field's function, and any special information needed to help understand the field's use.

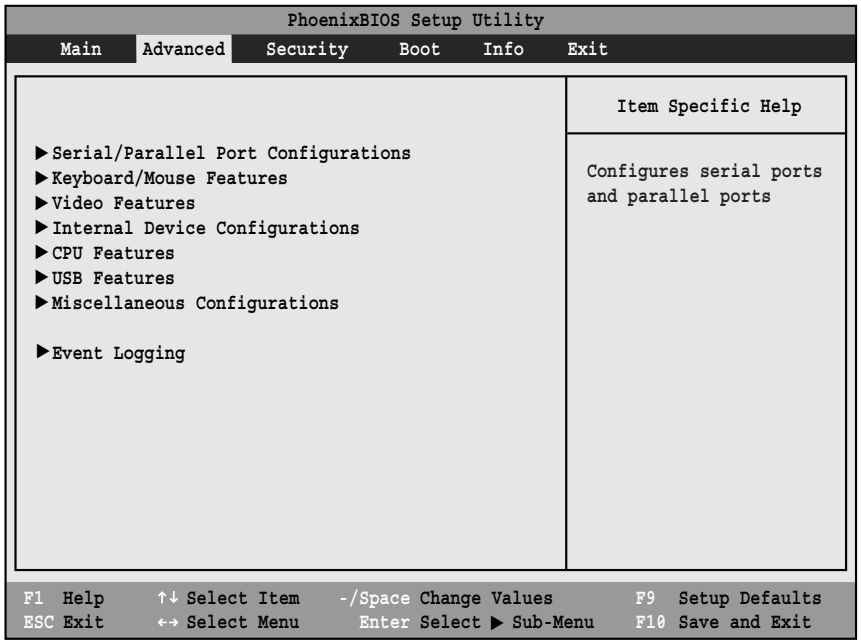

Figure 4. Advanced Menu

Table 4: Fields, Options and Defaults for the Advanced Menu

Menu Field	Description
Serial/Parallel Port Configurations	When selected, opens the Serial/Parallel Port Configurations submenu which allows the user to modify settings for serial, infrared and parallel ports.
Keyboard/Mouse Features	When selected, opens the Keyboard/Mouse Features submenu, which allows setting external and internal keyboard and mouse parameters.
Video Features	When selected, opens the Video Features submenu, which allows selecting between the display panel and/or an external CRT display or video projector.
Internal Device Configurations	When selected, opens the Internal Device Configuration submenu, which allows enabling or disabling the modem, IDE, and LAN Controllers.
CPU Features	When selected, opens the CPU Features submenu, which allows you to change the Intel(R) SpeedStep(R) Technology settings.
USB Features	Configures USB features.
Miscellaneous Configurations	Configures miscellaneous features, such as Wake Up On LAN and Power Button.
Event Logging	When selected, opens the event logging submenu.

Serial/Parallel Port Configuration Submenu of the Advanced Menu

The Serial/Parallel Port Configuration submenu lets you set the I/O addresses and interrupt levels for the serial, infrared and parallel ports of your notebook.

I/O addresses, DMA channels and Interrupt levels can be entered in various ways, including via the BIOS setup utility, the control software for the I/O device, or the hardware. If any two ports or devices, serial or parallel, have the same address assigned, your notebook will not function normally. Keep a record of original settings before making any changes if restoration is required. See your hardware and software documentation as well as the setup utility to determine settings and limitations.

- To prevent IRQ and address conflicts, avoid changing the default settings. If you must change the settings, you can call 1-800-8Fujitsu for technical assistance.
- If your notebook emits a series of beeps that sounds like a code and the display is blank, refer to the Troubleshooting Section in the system User's Guide. The Troubleshooting Section includes a list of error messages and their meanings.
- All I/O addresses in Table 5 are in hexadecimal.

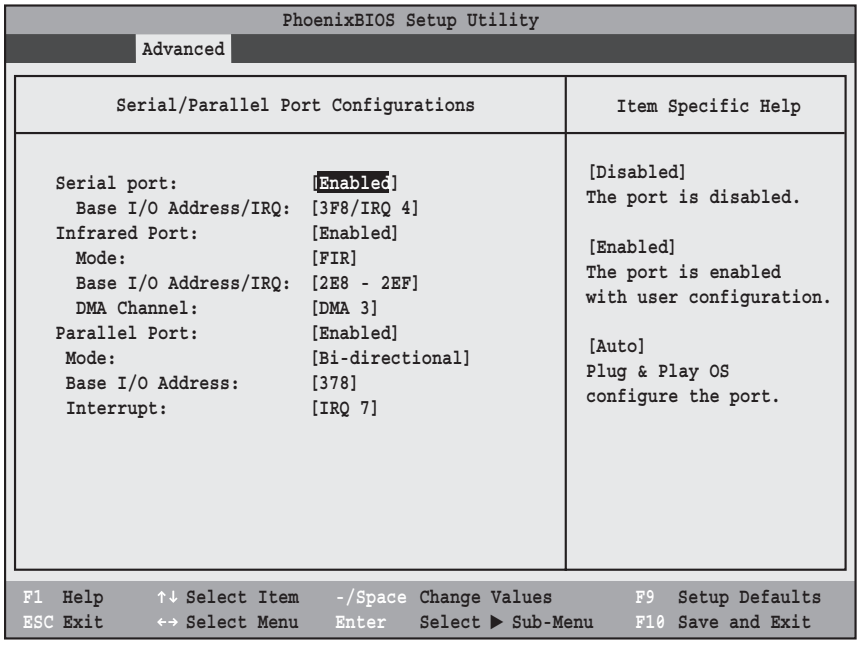
PhoenixBIOS Setup Utility
Advanced
Serial/Parallel Port Configurations
Item Specific Help
Serial port: [Enabled]
Base I/O Address/IRQ: [3F8/IRQ 4]
Infrared Port: [Enabled]
Mode: [FIR]
Base I/O Address/IRQ: [2E8 - 2EF]
DMA Channel: [DMA 3]
Parallel Port: [Enabled]
Mode: [Bi-directional]
Base I/O Address: [378]
Interrupt: [IRQ 7]
[Disabled]
The port is disabled.
[Enabled]
The port is enabled with user configuration.
[Auto]
Plug & Play OS configure the port.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 5. Serial/Parallel Port Configuration Submenu

Table 5: Fields, Options and Defaults for the Serial/Parallel Port Configuration Submenu of Advanced Menu

Menu Field	Options	Default	Description
Serial Port:	▪ Disabled ▪ Enabled ▪ Auto	[Enabled]	Configures the serial port using either no configuration (Disabled), a user defined configuration (Enabled), or by allowing the BIOS or OS to choose the configuration (Auto).
Base I/O Address/IRQ:	▪ 3F8/IRQ 4 ▪ 2F8/IRQ 3 ▪ 3E8/IRQ 4 ▪ 2E8/IRQ 3	[3F8/IRQ 4]	Allows user to set the serial port base I/O address and interrupt request when serial port is Enabled.
Infrared Port:	▪ Disabled ▪ Enabled ▪ Auto	[Enabled]	Configures the infrared port using either no configuration (Disabled), a user defined configuration (Enabled), or by allowing the BIOS or OS to choose the configuration (Auto).
Mode:	▪ IrDA ▪ FIR	[FIR]	When the infrared port is enabled this option is available allowing the user to set the mode for the infrared port.
Base I/O Address/IRQ:	▪ 3F8/IRQ 4 ▪ 2F8/IRQ 3 ▪ 3E8/IRQ 4 ▪ 2E8/IRQ 3	[2E8/IRQ 3]	Allows user to set the infrared port I/O address and interrupt request when the infrared port is Enabled.
DMA Channel:	▪ DMA 1 ▪ DMA 3	[DMA 3]	Allows user to set the infrared port DMA Channel when the infrared port is Enabled.
Parallel Port:	▪ Disabled ▪ Enabled ▪ Auto	[Enabled]	Configures the parallel port using either no configuration (Disabled), a user defined configuration (Enabled), or by allowing the BIOS or OS to choose the configuration (Auto).
Mode:	▪ Output Only ▪ Bi-directional ▪ ECP	[Bi-directional]	When the parallel port is enabled this option is available allowing the user to set the parallel port mode. Bi-directional allows two-way transfer of information between your notebook and a connected parallel device. Output Only (Half Duplex) allows information to be transferred in only one direction, from your notebook to the printer or similar device. ECP Mode allows communication with the ECP class of parallel I/O devices.
Base I/O address:	▪ 378 ▪ 278 ▪ 3BC	[378	Allows user to set the parallel port base I/O address when the parallel port is Enabled.
Interrupt:	▪ IRQ 5 ▪ IRQ 7	[IRQ 7]	Allows user to set the parallel port interrupt when the parallel port is Enabled.

Keyboard/Mouse Features Submenu of the Advanced Menu

The Keyboard/Mouse Features submenu is for setting the parameters of the integrated and external mouse and keyboard.

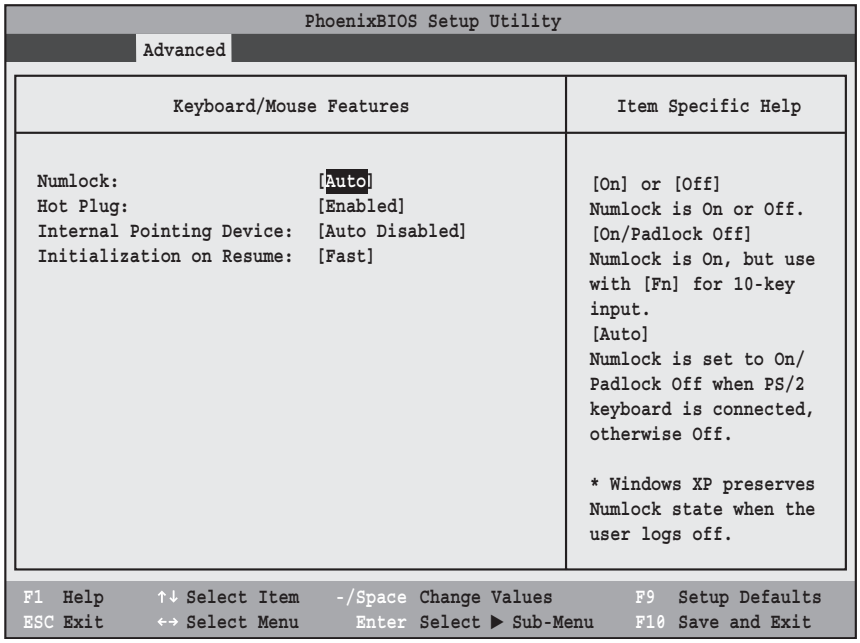
PhoenixBIOS Setup Utility
Advanced
Keyboard/Mouse Features
Item Specific Help
Numlock: [Auto]
Hot Plug: [Enabled]
Internal Pointing Device: [Auto Disabled]
Initialization on Resume: [Fast]
[On] or [Off]
Numlock is On or Off.
[On/Padlock Off]
Numlock is On, but use with [Fn] for 10-key input.
[Auto]
Numlock is set to On/ Padlock Off when PS/2 keyboard is connected, otherwise Off.
* Windows XP preserves Numlock state when the user logs off.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 6. Keyboard/Mouse Features Submenu

Table 6: Fields, Options and Defaults for the Keyboard/Mouse Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Numlock:	▪ Auto ▪ On ▪ Off ▪ On/Padlock Off	[Auto]	Sets the NumLock function state when the computer completes booting.
Hot Plug:	▪ Disabled ▪ Enabled	[Enabled]	Enables and disables the ability to plug a mouse or keyboard into the port and have it immediately recognized and active.
Internal Pointing Device:	▪ Auto Disabled ▪ Manual Setting ▪ Always Enabled ▪ Always Disabled	[Auto Disabled]	Sets the device controlling the mouse cursor on the screen. Always Enabled makes the pointing device always enabled whether there is an external mouse or not. Always Disabled makes the pointing device always disabled. Auto Disabled disables the internal pointing device when an external pointing device is connected to the port.
Initialization on Resume:	▪ Fast ▪ Normal	[Fast]	When Fast is selected, initialization for the external devices is optimized to speed up on Resume. When Normal is selected, initialization is not optimized.

Video Features Submenu of the Advanced Menu

The Video Features Submenu is for setting the display parameters.

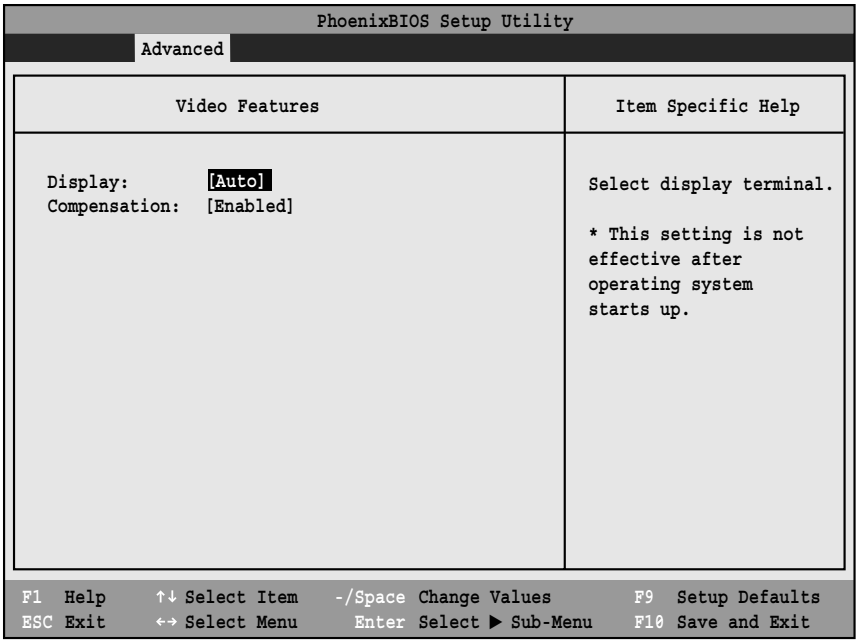
PhoenixBIOS Setup Utility
Advanced
Video Features
Item Specific Help
Display: [Auto]
Compensation: [Enabled]
Select display terminal.
* This setting is not effective after operating system starts up.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 7. Video Features Submenu

Table 7: Fields, Options and Defaults for the Video Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Display:	■ Internal Flat Panel ■ External (Analog) ■ External (Digital) ■ Auto	[Auto]	Selects where the video signal will be routed. Note that Windows settings take precedence over this setting after system boots up.
Compensation:	■ Disabled ■ Enabled	[Enabled]	Enables or disables display compensation. Note that Windows settings take precedence over this setting after system boots up.

Internal Device Configurations Submenu of the Advanced Menu

The Internal Device Configuration submenu allows the user to configure other internal devices.

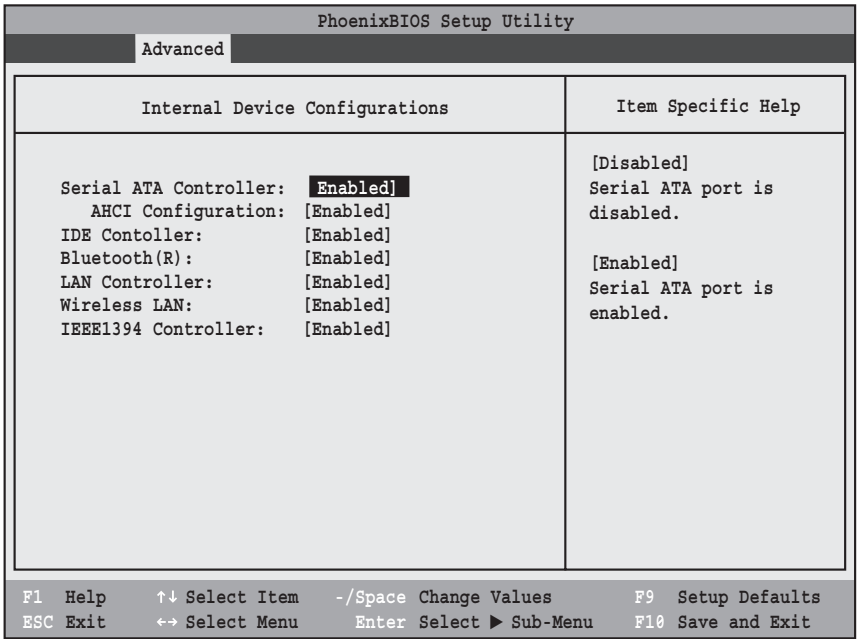

Figure 8. Internal Device Configuration Submenu

Table 8: Fields, Options and Defaults for the Internal Device Configuration Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Serial ATA Controller:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables serial ATA devices.
AHCI Controller:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables the AHCI (Advanced Host Controller Interface). This selection does not appear when PATA mode is enabled.
IDE Controller:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables the IDE port.
Bluetooth(R):	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables the Bluetooth(R) device, when present.
LAN Controller:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables the LAN controller.
Wireless LAN:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables the Wireless LAN device.
IEEE1394 Controller:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables the IEEE 1394 device.

CPU Features Submenu of the Advanced Menu

The CPU Features Submenu allows you to change the settings for Intel(R) SpeedStep(R) Technology for your system.

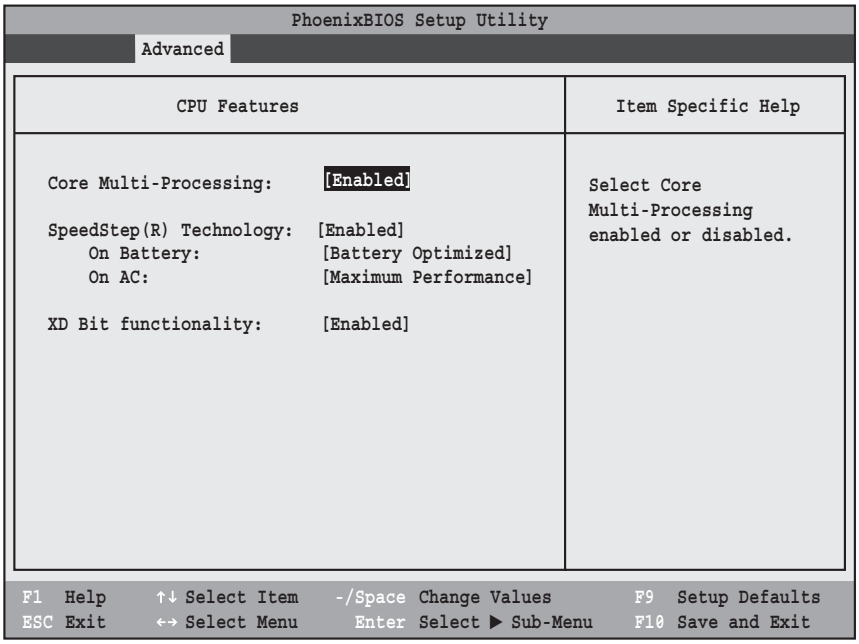
PhoenixBIOS Setup Utility
Advanced
CPU Features
Item Specific Help
Core Multi-Processing: [Enabled]
SpeedStep(R) Technology: [Enabled]
On Battery: [Battery Optimized]
On AC: [Maximum Performance]
XD Bit functionality: [Enabled]
Select Core Multi-Processing enabled or disabled.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 9. CPU Features Submenu

Table 9: Fields, Options and Defaults for the CPU Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Core Multi-Processing:	▪ Enabled ▪ Disabled	[Enabled]	Enables or disables the Intel Core Multi-Processing features.
SpeedStep(R) Technology:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables SpeedStep(R) Technology which allows the user to determine the CPU performance when the tablet is running on AC or battery. This technology decreases power consumption by decreasing CPU speeds.
On Battery:	▪ Maximum Performance ▪ Battery Optimized ▪ Automatic	[Battery Optimized]	Allows the user to select the CPU performance when the system is running on battery power.
On AC:	▪ Maximum Performance ▪ Battery Optimized ▪ Automatic	[Maximum Performance]	Allows the user to select the CPU performance when the system is running on AC power.

Table 9: Fields, Options and Defaults for the CPU Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
XD Bit functionality:	▪ Enabled] ▪ Disabled	[Enabled]	Allows the user to enable and disable the Execute Disable Bit functionality. Execute Disable Bit allows the processor to classify areas in memory where application code can and cannot execute. In the event an internet worm attempts to insert code in the buffer, the processor disables code execution to prevent damage or worm propagation.

USB Features Submenu of the Advanced Menu

The USB Features Submenu enables and disables legacy USB support for your system.

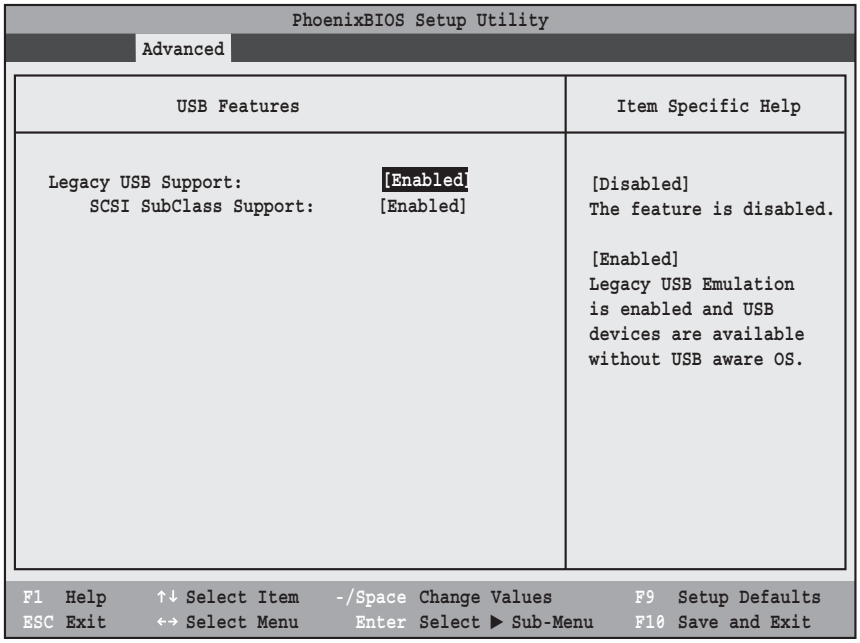
PhoenixBIOS Setup Utility
Advanced
USB Features
Item Specific Help
Legacy USB Support: [Enabled]
SCSI SubClass Support: [Enabled]
[Disabled]
The feature is disabled.
[Enabled]
Legacy USB Emulation is enabled and USB devices are available without USB aware OS.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 10. USB Features Submenu

Table 10: Fields, Options and Defaults for the USB Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Legacy USB Support:	▪ Disabled ▪ Enabled	[Enabled]	When Disabled is selected, legacy USB emulation is disabled. When Enabled is selected, legacy USB emulation is enabled and USB devices are available without USB-aware OS.
SCSI SubClass Support:	▪ Disabled ▪ Enabled	[Enabled]	When Enabled is selected, USB devices that belong to the SCSI sub-class in the mass storage class (e.g., USB Memory Key) are enabled.

Miscellaneous Configurations Submenu of the Advanced Menu

The Miscellaneous Configurations Submenu configures the miscellaneous features for your system.

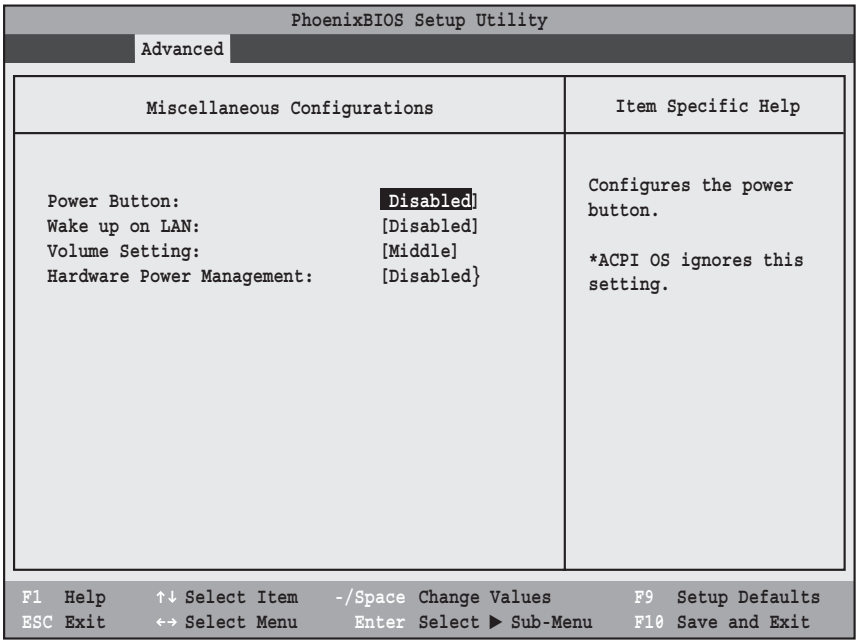
PhoenixBIOS Setup Utility
Advanced
Miscellaneous Configurations
Item Specific Help
Power Button: [Disabled]
Wake up on LAN: [Disabled]
Volume Setting: [Middle]
Hardware Power Management: [Disabled}
Configures the power button.
*ACPI OS ignores this setting.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 11. Miscellaneous Configurations Submenu

Table 11: Fields, Options and Defaults for the Miscellaneous Configurations Submenu

Menu Field	Options	Default	Description
Power Button:	▪ Disabled ▪ Power Off	[Disabled]	Selecting Disabled disables the power button. Selecting Power Off allows you to turn off system power with the power button.
Wake up on LAN:	▪ Disabled ▪ Enabled	[Disabled]	Selecting Enabled allows the system to wake up when the internal LAN device receives a specific signal while in power-off state. Selecting Disabled disables this feature.
Force LAN Boot:	▪ Disabled ▪ Enabled	[Disabled]	This feature is active only when "Wake up on LAN" is enabled. When enabled, in the event of a system wake-up on LAN, the system will try to first boot from the LAN before attempting to boot from any other device, regardless of the BIOS boot priority settings or disabling of the Preboot Execution Environment.
Volume Setting:	▪ Off ▪ Minimum ▪ Middle ▪ Maximum	[Middle]	Selects the initial volume setting for the system.

Table 11: Fields, Options and Defaults for the Miscellaneous Configurations Submenu

Menu Field	Options	Default	Description
UMA Video Memory Size:	■ 64MB ■ 128MB ■ 224MB	[128MB]	Allows you to select the maximum shared video memory size. Video memory is dynamically allocated as needed for running applications by Dynamic Video Memory Technology (DVMT).
Hardware Power Management:	■ Disabled ■ Enabled	[Enabled]	Enables or disables the Hardware Power Management feature.

Event Logging Submenu of the Advanced Menu

The Event Logging Submenu configures event logging features for DMI events.

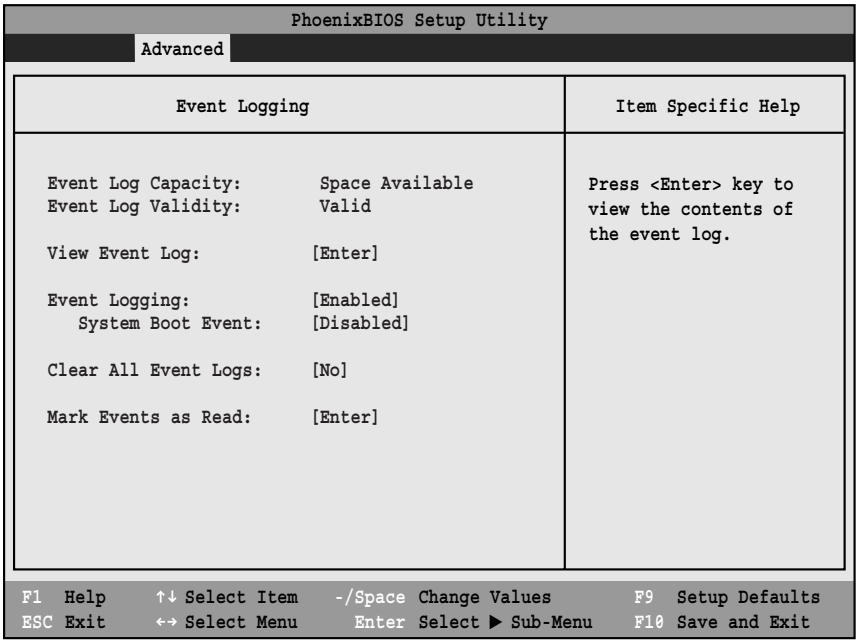
PhoenixBIOS Setup Utility
Advanced
Event Logging
Item Specific Help
Event Log Capacity: Space Available
Event Log Validity: Valid
View Event Log: [Enter]
Event Logging: [Enabled]
System Boot Event: [Disabled]
Clear All Event Logs: [No]
Mark Events as Read: [Enter]
Press <Enter> key to view the contents of the event log.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 12. Event Logging Submenu

Table 12: Fields, Options and Defaults for the Event Logging Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Event Log Capacity:		Space Available	Display only.
Event Log Validity:		Valid	Display only.
View Event Log:	▪ Enter	[Enter]	Allows you to view content of event log.
Event Logging:	▪ Disabled ▪ Enabled	[Enabled]	Turns event logging on and off for all DMI events.
System Boot Event:	▪ Disabled ▪ Enabled	[Disabled]	Turns event logging on and off for DMI system boot events.
Clear All Event Logs:	▪ No ▪ Yes	[No]	When set to [Yes] all event logs will be cleared at next boot.
Mark Events as Read:	▪ Enter	[Enter]	Allows you to make all events currently in the event log as read.

SECURITY MENU – SETTING THE SECURITY FEATURES

The Security menu allows you to set up the data security features of your notebook to fit your operating needs and to view the current data security configuration. Follow the instructions for Navigating Through the Setup Utility to make any changes. *(See Navigating Through the Setup Utility on page 2 for more information)*

The following tables show the names of the menu fields for the Security menu and its submenus, the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use. The default condition is no passwords required and no write protection.

Entering a password incorrectly three times in a row will cause the keyboard and mouse to be locked out and the warning `[System Disabled]` to be displayed. If this happens, restart the computer by turning off and on the power with the power switch and use the correct password on reboot.

- If you set a password, write it down and keep it in a safe place. If you forget the password you will have to contact your support representative to regain access to your secured functions and data.
- If you make an error when re-entering the password a `[Warning]` will be displayed on the screen. To try again press the [Enter] key and then retype the password. Press the [Esc] key to abort the password setting process.
- If the Password on Boot is Disabled you will not have to type your password upon resuming the system from the Suspend or Save-to-Disk modes.

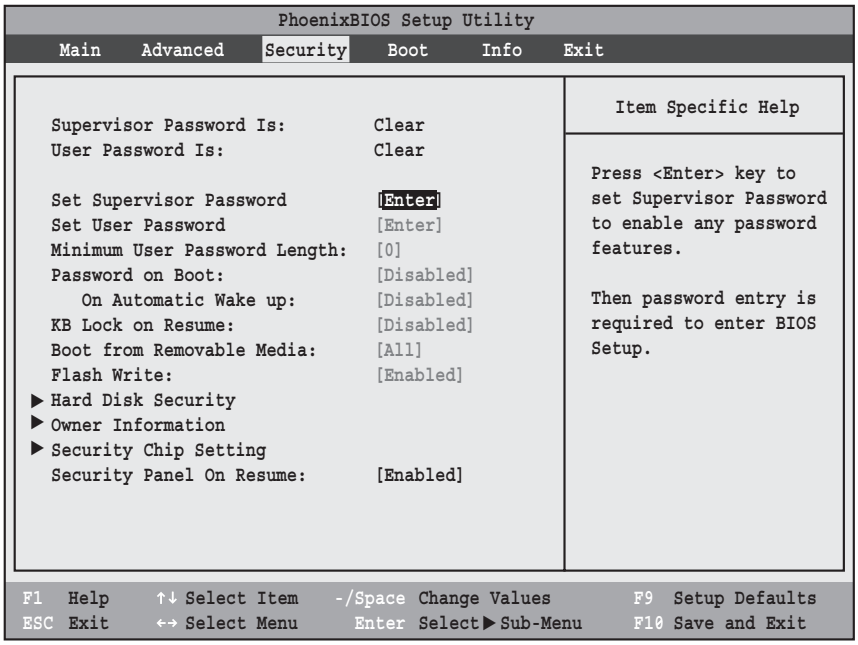
PhoenixBIOS Setup Utility
Main Advanced Security Boot Info Exit
Item Specific Help
Supervisor Password Is: Clear
User Password Is: Clear
Set Supervisor Password [Enter]
Set User Password [Enter]
Minimum User Password Length: [0]
Password on Boot: [Disabled]
On Automatic Wake up: [Disabled]
KB Lock on Resume: [Disabled]
Boot from Removable Media: [All]
Flash Write: [Enabled]
▶ Hard Disk Security
▶ Owner Information
▶ Security Chip Setting
Security Panel On Resume: [Enabled]
Press <Enter> key to set Supervisor Password to enable any password features.
Then password entry is required to enter BIOS Setup.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select▶Sub-Menu F10 Save and Exit

Figure 13. Security Menu

Table 13: Fields, Options and Defaults for the Security Menu

Menu Field	Options	Default	Description
Supervisor Password is:	—	Clear	A display-only field. Set is displayed when the system Supervisor Password is set and Clear when it is not.
User Password is:	—	Clear	A display-only field. Set is displayed when the general User Password is set, and Clear when it is not.
Set Supervisor Password	[Enter]	[Enter]	Sets, changes or cancels Supervisor Password. The Supervisor Password may be up to seven characters long and include only letters or numbers (no symbols). Passwords are NOT case- sensitive. To cancel a password press the Enter key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a Supervisor Password is set it must be used to access the BIOS setup utility.
Set User Password	[Enter]	[Enter]	This field can only be accessed if the Supervisor Password is set. Sets, changes or cancels the User Password. The User Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the Enter key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a User Password is set it must be used to access the BIOS setup utility.
Minimum User Password Length:	[0]	[0]	Sets the minimum length for User Password.
Password on Boot:	▪ Disabled ▪ First Boot ▪ Every Boot	[Disabled]	When Enabled, a password (User or Supervisor) is required after the Power On Self Test (POST) before the operating system will be read from a disk. When set to Disabled no password is required. If no Supervisor Password is set this feature is not available and no password is required.
On Automatic Wake up:	▪ Disabled ▪ Enabled	[Disabled]	This field is active only when Password On Boot is set to First Boot or Every Boot. When disabled, password entry is not required on automatic wake up on LAN or Real Time Clock. When enabled, the password is still required on automatic wake up.
KB Lock on Resume:	▪ Disabled ▪ Enabled	[Disabled]	When set to Enabled, the keyboard and mouse inputs are locked out upon Suspend from Resume or Save-to-Disk mode until the password is entered. When both passwords are set, the User password is always used to lock. Password entry before OS boot is disabled upon unattended boot.
Boot from Removable Media:	▪ All ▪ Supervisor only	[All]	Enable password allows supervisor access only.
Flash Write:	▪ Disabled ▪ Enabled	[Enabled]	When disabled, the BIOS Flash memory is write protected.
Hard Disk Security	—	—	When selected, opens the Hard Disk Security submenu, which allows you to configure hard disk security features.
Owner Information	—	—	When selected, opens the Owner Information submenu, which allows you to set Owner information.
Security Chip Setting	—	—	When selected, opens the Security Chip Settings submenu, which allows you to set Security Chip information.
Security Panel On Resume	▪ Disabled ▪ Enabled	[Enabled]	Allows the Security Panel Feature to be enabled or disabled upon Suspend from Resume.

Hard Disk Security Submenu of the Security Menu

The Hard Disk Security submenu is for configuring hard disk security features.

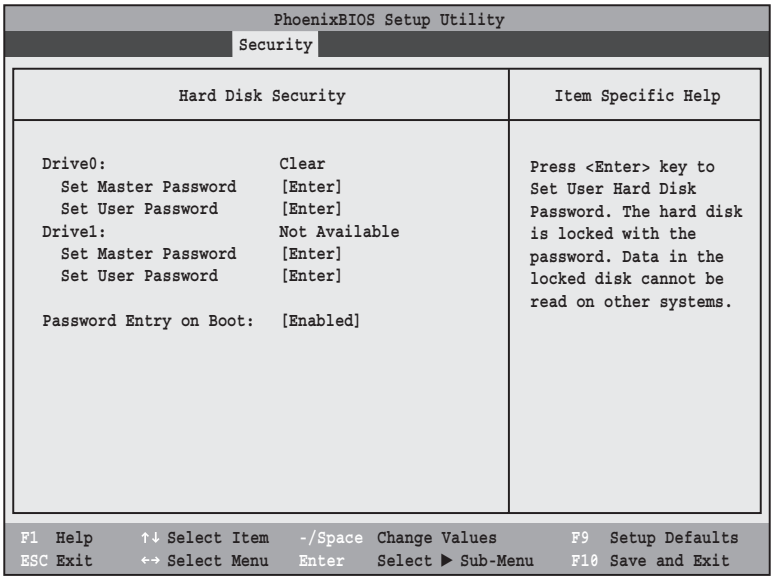
PhoenixBIOS Setup Utility
Security
Hard Disk Security
Item Specific Help
Drive0: Clear
Set Master Password [Enter]
Set User Password [Enter]
Drive1: Not Available
Set Master Password [Enter]
Set User Password [Enter]
Password Entry on Boot: [Enabled]
Press <Enter> key to Set User Hard Disk Password. The hard disk is locked with the password. Data in the locked disk cannot be read on other systems.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 14. Hard Disk Security Submenu

Table 14: Fields, Options and Defaults for the Hard Disk Security Submenu of the Security Menu

Menu Field	Options	Default	Description
Drive0:	____	Clear	Display-only. Default is Clear. When the Drive0 Password has been set, the field changes to Set. When this password is set, the primary hard disk drive cannot be used in another system unless the password is entered.
Set Master Password	____	[Enter]	Sets, changes or cancels the Drive0 Master Password. The Drive0 Master Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. When a Drive0 Master Password is set, it must be used to access the hard drive if it is used in another system. Note that the password will not take effect until the system has been rebooted.
Set User Password	____	[Enter]	Sets, changes or cancels the Drive0 User Password. The Drive0 User Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. When a Drive0 User Password is set, it must be used to access the modular hard drive if it is used in another system. Note that the password will not take effect until the system has been rebooted.
Drive1:	____	Not Available	Display-only. Default is Not Available. When Drive1 Password has been set, the field changes to Set. When this password is set, the secondary (modular) hard disk drive cannot be used in another system unless the password is entered.
Set Master Password:	____	[Enter]	Sets, changes or cancels the Drive1 Master Password. The Drive1 Master Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. When a Drive1Master Password is set, it must be used to access the hard drive if it is used in another system. Note that the password will not take effect until the system has been rebooted.

Table 14: Fields, Options and Defaults for the Hard Disk Security Submenu of the Security Menu

Menu Field	Options	Default	Description
Set User Password:	____	[Enter]	Sets, changes or cancels the Drive1 USer Password. The Drive1 User Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. When a Drive1 User Password is set, it must be used to access the modular hard drive if it is used in another system. Note that the password will not take effect until the system has been rebooted.
Password Entry on Boot:	▪ Disabled ▪ Enabled	[Enabled]	When set to disabled, entry of a Hard Disk Password is not required before OS boot. (The hard disk is still password-protected without password entry.)

Owner Information Submenu of the Security Menu

The Owner Information Submenu is for setting owner information. Note that Owner Information cannot be set without having entered a supervisor's password.

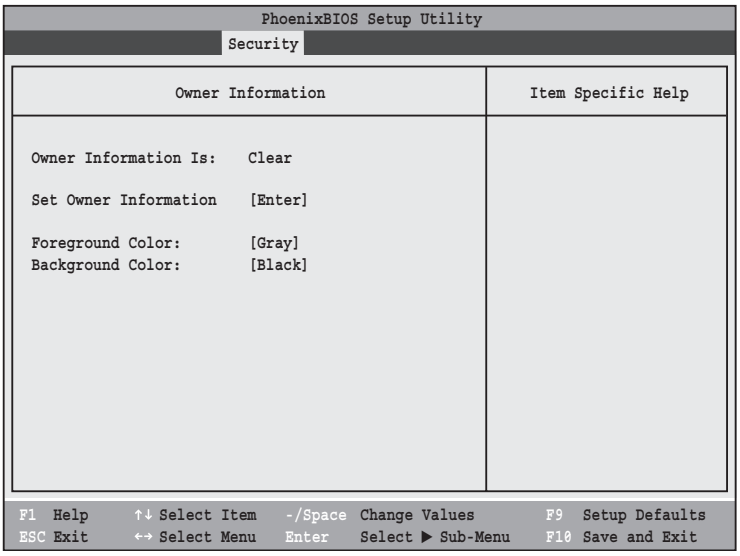
PhoenixBIOS Setup Utility
Security
Owner Information
Item Specific Help
Owner Information Is: Clear
Set Owner Information [Enter]
Foreground Color: [Gray]
Background Color: [Black]
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 15. Owner Information Submenu

Table 15: Fields, Options and Defaults for the Owner Information Submenu of the Security Menu

Note: The fields on this submenu cannot be changed unless the Supervisor Password is set.

Menu Field	Options	Default	Description
Owner Information Is:	—	Clear	Display only.
Set Owner Information:	—	[Enter]	Field to write owner information, e.g., your name.
Foreground Color:	■ Black ■ Blue ■ Green ■ Cyan ■ Red ■ Magenta ■ Brown ■ White ■ Gray ■ Light Blue ■ Light Green ■ Light Cyan ■ Light Red ■ Light Magenta ■ Yellow ■ Bright White	[Gray]	Set foreground color.
Background Color:	■ Black ■ Blue ■ Green ■ Cyan ■ Red ■ Magenta ■ Brown ■ White ■ Gray ■ Light Blue ■ Light Green ■ Light Cyan ■ Light Red ■ Light Magenta ■ Yellow ■ Bright White	[Black]	Sets background color.

Security Chip Setting Submenu of the Security Menu

The Security Chip Setting submenu is used to enable or disabled the embedded security chip.

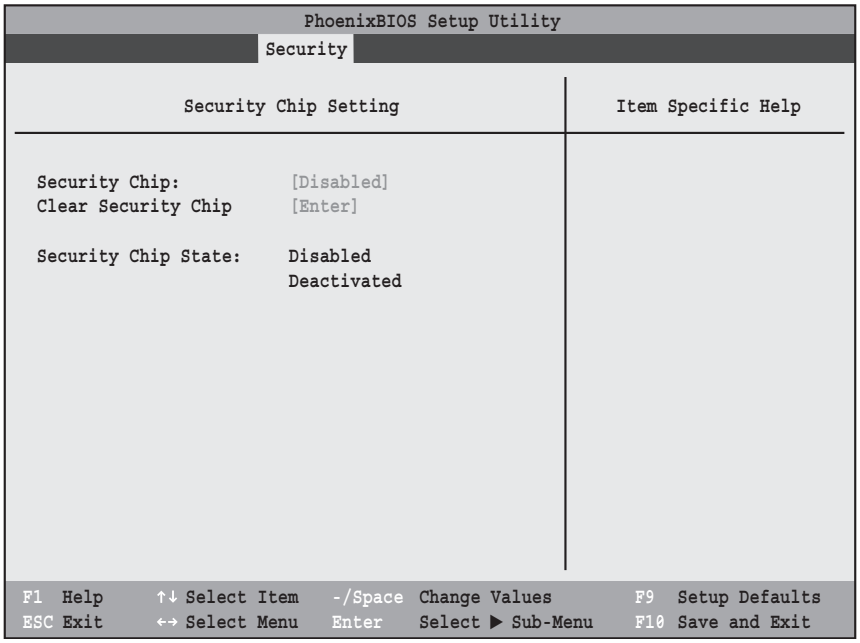
PhoenixBIOS Setup Utility
Security
Security Chip Setting
Item Specific Help
Security Chip: [Disabled]
Clear Security Chip [Enter]
Security Chip State: Disabled
Deactivated
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 16. Security Chip Setting Submenu

Menu Field	Options	Default	Description
Security Chip:	▪ Disabled ▪ Enabled	[Disabled]	Allows you to enable or disable the security chip. Note that this is only active if a Supervisor Password has been entered. A reboot is required after exit to configure the Security Chip correctly. Clear Security Chip option becomes selectable after reboot.
Clear Security Chip	—	[Enter]	This field is not selectable until after the security chip is enabled and the system is rebooted.
Security Chip State:	▪ Disabled ▪ Deactivated	—	Display only, to indicate the state of the chip if it has been disabled or deactivated.

Exiting from the Security Menu

When you have finished setting the parameters on the Security Menu, you can either exit from setup utility or move to another menu. If you wish to exit from setup utility, press the [Esc] key to go to the Exit Menu. If you wish to move to another menu, use the cursor keys.

BOOT MENU – SELECTING THE OPERATING SYSTEM SOURCE

The Boot Menu is used to select the order in which the BIOS searches sources for the operating system. Follow the instructions for Navigating Through the Setup Utility to make any changes. *(See Navigating Through the Setup Utility on page 2 for more information)*

The following tables show the names of the menu fields for the Boot menu and its submenu, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

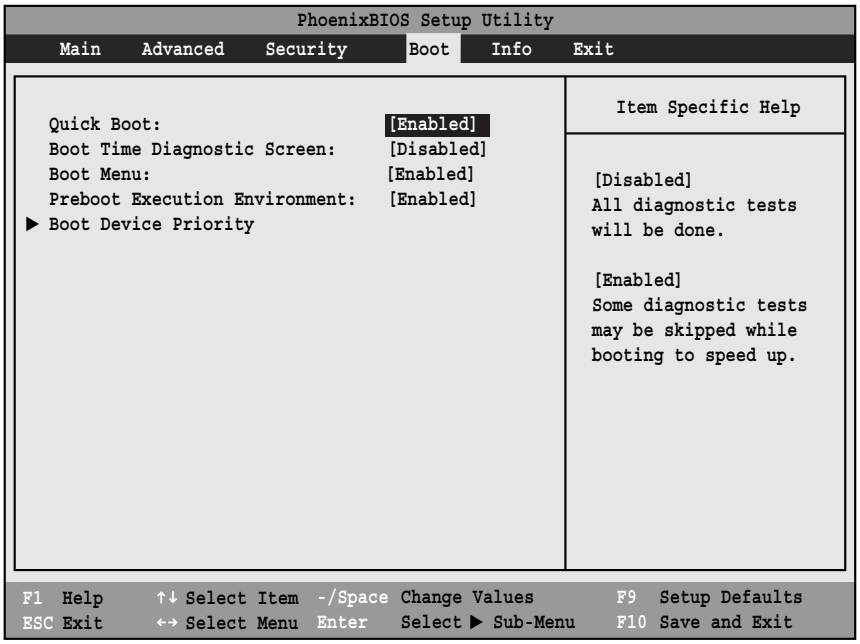
PhoenixBIOS Setup Utility
Main Advanced Security Boot Info Exit
Quick Boot: [Enabled]
Boot Time Diagnostic Screen: [Disabled]
Boot Menu: [Enabled]
Preboot Execution Environment: [Enabled]
▶ Boot Device Priority
Item Specific Help
[Disabled]
All diagnostic tests will be done.
[Enabled]
Some diagnostic tests may be skipped while booting to speed up.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 17. Boot Menu

Table 17: Fields, Options and Defaults for the Boot Menu

Menu Field	Options	Default	Description
Quick Boot:	▪ Disabled ▪ Enabled	[Enabled]	Turns on and off booting with a truncated set of Power On Self Tests. (Fewer tests mean faster turn on.)
Boot Time Diagnostic Screen:	▪ Disabled ▪ Enabled	[Disabled]	Turns on and off display of test results instead of Fujitsu logo screen during Power On Self Test.
Boot Menu:	▪ Disabled ▪ Enabled	[Enabled]	When disabled, the boot menu is disabled and the F12 key is ignored. When enabled, the boot menu is enabled. **Note:** This field cannot be changed unless the Supervisor Password is set.
Preboot Execution Environment:	▪ Disabled ▪ Enabled	[Enabled]	Turns on and off boot from network server options.
Boot Device Priority:	Selects the Boot Device Priority submenu	—	This menu allows setting up the source for the operating system. See "Boot Device Priority Submenu" in the following section.

Boot Device Priority Submenu of the Boot Menu

The Boot Device Priority submenu is for setting the order of checking of sources for the operating system.

- Be careful of the operating environment when booting from a CD or you may overwrite files by mistake.
- A bootable CD-ROM has either a floppy disk format or a hard drive format. When the bootable CD-ROM is used, the drive allocations change automatically without changing the BIOS setup. If a floppy disk format is used, the CD-ROM becomes Drive A. The CD-ROM will only take drive C: (hard drive format) if the internal hard drive is not present or is disabled. The bootable CD-ROM can never use a C: designation if a formatted internal hard drive is present since the C: designator is always reserved for the internal hard drive.The boot sequence ignores the new drive designations, however, your application software will use the new designations.

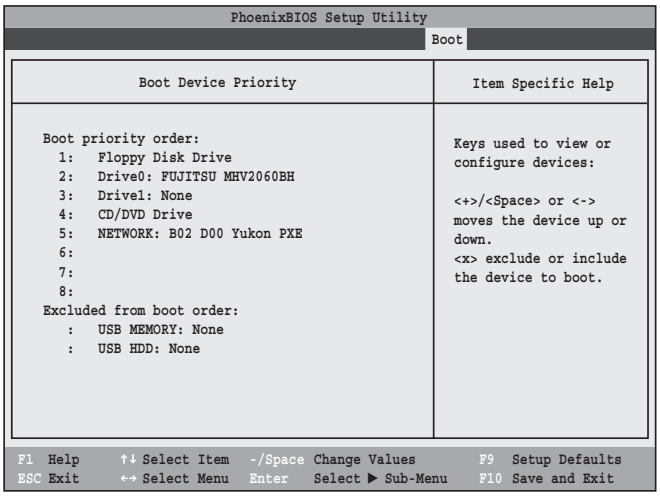
PhoenixBIOS Setup Utility
Boot
Boot Device Priority
Item Specific Help
Boot priority order:
1: Floppy Disk Drive
2: Drive0: FUJITSU MHV2060BH
3: Drive1: None
4: CD/DVD Drive
5: NETWORK: B02 D00 Yukon PXE
6:
7:
8:
Excluded from boot order:
: USB MEMORY: None
: USB HDD: None
Keys used to view or configure devices:
<+>/<Space> or <-> moves the device up or down.
<x> exclude or include the device to boot.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 18. Boot Device Priority Submenu

Table 18: Fields, Options and Defaults for the Boot Device Priority Submenu of the Boot Menu

Menu Field	Description
Boot priority order: 1: Floppy Disk Drive 2: Drive0: 3: Drive1: 4: CD/DVD Drive 5: NETWORK: 6: 7: 8: Excluded from boot order: : USB MEMORY: : USB HDD:	The boot selections determine the order in which the BIOS searches for the operating system during a startup sequence. To change the order, highlight one source by using the [up] or [down] cursor keys and then press the [+] or [-] key to change the order number. Tapping [x] removes from the list a device that is not installed. Tapping [x] on an item in the Excluded list adds the device to the Boot priority list. Be sure to save your changed order when you exit the BIOS setup utility. NOTE: Be aware that if you use the CD-ROM drive as the first boot device, certain files may be overwritten, depending upon your operating environment.

Exiting from Boot Menu

When you have finished setting the boot parameters with the Boot Menu, you can either exit from the setup utility or move to another menu. If you wish to exit from the setup utility press the [Esc] key to go to the Exit Menu. If you wish to move to another menu, use the cursor keys.

INFO MENU – DISPLAYS BASIC SYSTEM INFORMATION

The Info menu is a display only screens that provides the configuration information for your notebook.

The following table shows the names of the menu fields for the Info menu and the information displayed in those fields. These fields are for information purposes only, and are not editable.

The information, including CPU type and speed, and total memory, displayed on this screen varies according to the unit you purchased.

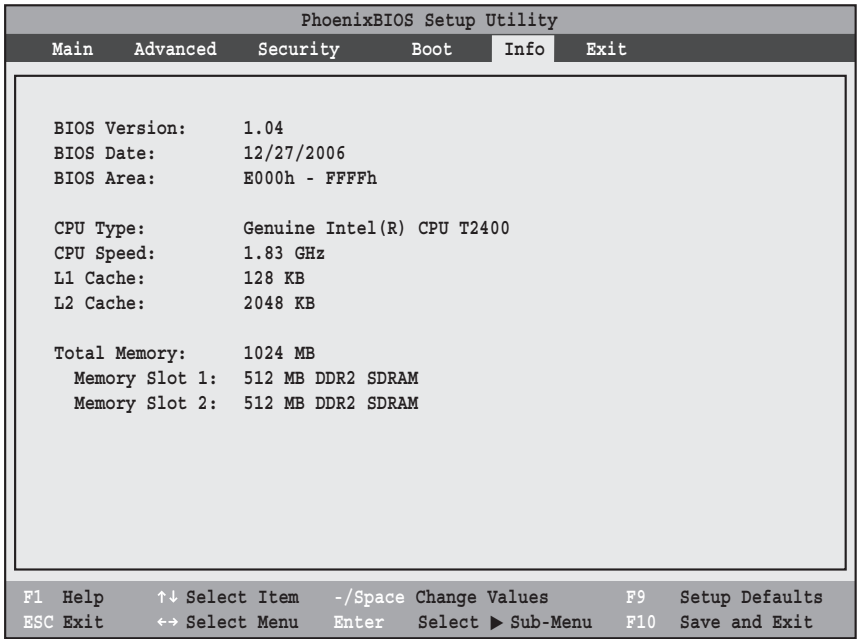
PhoenixBIOS Setup Utility
Main Advanced Security Boot Info Exit
BIOS Version: 1.04
BIOS Date: 12/27/2006
BIOS Area: E000h - FFFFh
CPU Type: Genuine Intel(R) CPU T2400
CPU Speed: 1.83 GHz
L1 Cache: 128 KB
L2 Cache: 2048 KB
Total Memory: 1024 MB
Memory Slot 1: 512 MB DDR2 SDRAM
Memory Slot 2: 512 MB DDR2 SDRAM
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 19. Info Menu

Table 19: Fields, Options and Defaults for the Info Menu

Note that the **parameters listed in the following table may be different**, depending upon your system configuration.

Menu Field	Default	Menu Field	Default
BIOS Version:	1.XX	L1 Cache:	128 KB
BIOS Date:	XX/XX/XXXX	L2 Cache:	2048 KB
BIOS Area:	E000h – FFFFh	Total Memory:	1024 MB
CPU Type:	Genuine Intel(R) CPU T2400	Memory Slot 1:	512 MB DDR2 SDRAM
CPU Speed:	1.83 GHz	Memory Slot 2:	512 MB DDR2 SDRAM

EXIT MENU – LEAVING THE SETUP UTILITY

The Exit Menu is used to leave the setup utility. Follow the instructions for Navigating Through the Setup Utility to make any changes. *(See Navigating Through the Setup Utility on page 2 for more information)*. The following table shows the names of the menu fields for the Exit menu, the default settings and a description of the field's function and any special information needed to help understand the field's use.

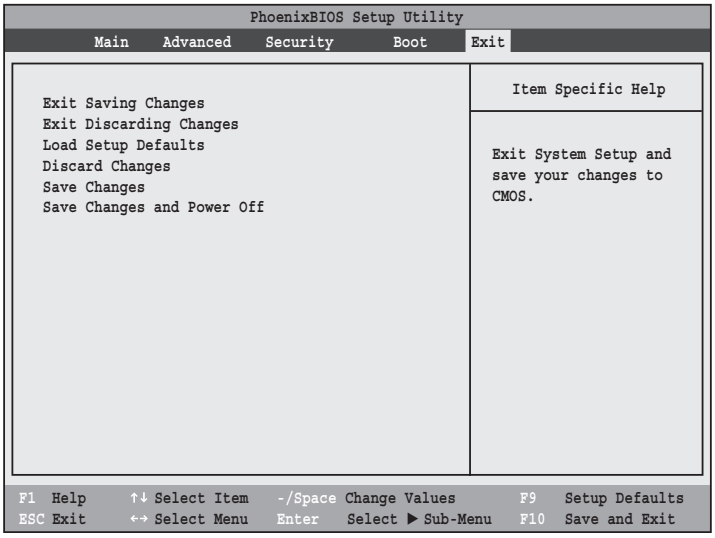

Figure 20. Exit Menu

Table 20: Fields, Options and Defaults for the Exit Menu

Menu Field	Description
Exit Saving Changes	Exit Saving Changes and Exit will store all the entries on every menu of the setup utility to the BIOS memory and then exit the setup utility. A confirmation message `Save Configuration changes and exit now? [Yes] [No]` will be displayed.
Exit Discarding Changes	Selecting Exit Discarding Changes and Exit will exit the setup utility with out writing to the BIOS memory. When the BIOS recognizes this selection it will load the operating system and begin operation.
Load Setup Defaults	Selecting Load Setup Defaults will load the factory preset default values for all menu fields, then display the message `Load default configuration now? [Yes] [No].` When confirmed the setup utility will return to the Exit Menu. To return to another menu follow the directions in the Navigating Through the Setup Utility Section.
Discard Changes	Selecting Discard Changes will load the previous values in BIOS memory for all menu fields. The message `Load previous configuration now? [Yes] [No]` will be displayed. When confirmed the utility will return to the Exit menu. To return to another menu, follow the directions in the Navigating Through the Setup Utility Section.
Save Changes	Selecting Save Changes causes the new settings in all menus to be written to the BIOS memory. The message `Save configuration changes now? [Yes] [No]` will be displayed. When confirmed, the setup utility will return to the Exit menu. To go to another menu, follow the directions in the Navigating Through the Setup Utility section.
Save Changes and Power Off	Selecting Save Changes and Power Off will cause the new settings in all menus to be written to the BIOS memory, then power the system off. The message `Save configuration changes now and power off? [Yes] [No]` will be displayed. When confirmed, the setup utility shut down the system.